



Dr. Ph.D. Yang Zijiang
Research Fellow
Biomedical Engineering and Stem Cell Bioengineering)
Harvard-MIT Health Sciences and Technology
Harvard Medicine School & MIT
Cambridge, MA, USA

Education

- 2010 – 2013** **Research Fellow (Biomedical Engineering and Stem Cell Bioengineering)**
Harvard-MIT Health Sciences and Technology
Harvard Medicine School & MIT, Cambridge, MA, US
- 2007 – 2010** **Ph.D. (stem cell therapy for neovascularization)**
Institute of Clinical Research (DKF), University of Bern, Bern, Switzerland
- 2005 – 2007** **M.Sc. (molecular cell biology)**
Uppsala University, Uppsala, Sweden
Karolinska Institutet, Stockholm, Sweden
- 2003 – 2004** **Poly/Monoclonal Antibody Researcher**
Shanghai Genomics, Inc., National Human Genome Centre at Shanghai, China
- 1999 – 2003** **B.Eng. (Bioengineering)**
Shanghai Jiao Tong University, China

Professional Experience

- 2015 -** **Hangzhou Life Perfusor Medical, Hangzhou, China**
Co-Founder
- 2015 - 2016** **Velox Biosystems, U.S.**
Co-Founder
- 2014 -** **Shanghai Jiao Tong University**
Researcher

Professional Affiliations and Activity:

2018 - - IOPS, International Organ Protection Society,
Co-Founder, Member of Committee International

Awards

2003 Best B.Eng. thesis, Shanghai Jiao Tong University
2008 Department of Clinical Research Day, University of Bern
Best Poster in Medical Student Section
2010 Pfizer Research Price (Stiftung Pfizer Forschungs-Preis), Switzerland
Cardiovascular, Urology and Nephrology Section
2010 Fellowship for prospective researchers, Swiss National Science Foundation
Nr. PBBEP3_133508
2010 Swiss Society of Angiology (Schweizerische Gesellschaft für Angiologie), Switzerland
2010 Swiss Angiology Price (Schweizerischer Angiologiepreis 2010)
2010 Chinese Government Award for Outstanding Self-Financed Students Abroad

Patents

12 issued patents in China

Publications

Hjortsberg L, Pokrovskaja K, Björklund A, **Yang Z**, Arulampalam V, Grandér D. Importance of STAT-signaling in interferon-alpha induced apoptosis. 2007. ISBN: 978-91 -7357-186-9.

Yang Z. The role of endothelial progenitor cell in therapeutic neovascularization. University of Bern, Switzerland; 2010. (Ph.D. thesis)

Di Santo S, Diehm N, Ortmann J, Voelzmann J, **Yang Z**, Keo HK, Baumgartner I, Kalka C. Oxidized low density lipoproteins (oxLDL) impairs endothelial progenitor cell function by downregulation of E-selectin and integrin $\alpha\beta 5$.
Biochem Biophys Res Commun. 2008; 373(4):528:532.

Di Santo S*, **Yang Z***, Wyler von Ballmoos M, Voelzmann J, Diehm N, Baumgartner I, Kalka C. Novel cell-free strategy for therapeutic angiogenesis: In vitro generated conditioned medium can replace progenitor cell transplantation. PLoS One. 2009 May 21; 4(5):e5643.

Yang Z, von Ballmoos MW, Diehm N, Baumgartner I, Kalka C, Di Santo S. Call for a reference model of chronic hind limb ischemia to investigate therapeutic angiogenesis. Vascular Pharmacology. 51 (2009) 268–274.

von Ballmoos MW*, **Yang Z***, Diehm N, Völzmann J, Baumgartner I, Kalka C, Di Santo S. Endothelial progenitor cells induce a phenotype shift in differentiated endothelial cells towards PDGF-BB sensitivity and increased angiogenesis. J Vasc Res 2009; 46:5-60.

Yang Z, von Ballmoos MW, Faesselr D, Voelzmann J, Ortmann J, Diehm N, Kalka-Moll W, Baumgartner I, DiSanto S, Kalka C. Paracrine factors secreted by endothelial progenitor cells prevent oxidative stress-induced apoptosis of mature endothelial cells. *Atherosclerosis*. 2010 Jul; 211(1):103-109.

Ortmann J, Veith M, Zingg S, Di Santo S, Traupe T, **Yang Z**, Völzmann J, Dubey R, Christen S, Baumgartner I. Estrogen Receptor- α But Not β or GPER Inhibits High Glucose-Induced Human VSMC Proliferation: Potential Role of ROS and ERK. *J Clin Endocrinol Metab*. 2011 Jan; 96(1):220-8.

Wyler von Ballmoos M*, **Yang Z***, Völzmann J, Baumgartner I, Kalka C, Di Santo S. Endothelial Progenitor Cells Induce a Phenotype Shift in Differentiated Endothelial Cells towards PDGF/PDGFR β Axis-Mediated Angiogenesis. *PLoS One*. 2010 Nov 24; 5(11):e14107.

Yang Z, Di Santo S, Kalka C. Current developments in the use of stem cell for therapeutic neovascularization: Is the future therapy "cell-free"? *Swiss Med Wkly*. 2010 Dec 17; 140:w13130.

Gajanayake T, Olariu R, Leclère FM, Dhayani A, **Yang Z**, Bongoni AK, Banz Y, Constantinescu MA, Karp JM, Vemula PK, Rieben R, Vögelin E. *A single localized dose of enzyme-responsive hydrogel improves long-term survival of a vascularized composite allograft. (Sci Transl Med. 2014 Aug 13; 6(249):249ra110.)*

Teo GS, **Yang Z**, Carman CV, Karp JM, Lin CP. *Intravital imaging of mesenchymal stem cell trafficking and association with platelets and neutrophils. (Stem Cells. 2015 Jan; 33(1):265-77.)*

Levy O, Mortensen LJ, Boquet G, Tong Z, Perrault C, Benhamou B, Zhang J, Stratton T, Han E, Safaee H, Musabeyezu J, **Yang Z**, Multon MC, Rothblatt J, Deleuze JF, Lin CP, Karp JM. *A small-molecule screen for enhanced homing of systemically infused cells. (Cell Rep. 2015 Mar 3; 10(8):1261-1268.)*

Yang Z, Concannon J, Ng KS, Seyb K, Mortensen LJ, Ranganath S, Gu F, Levy O, Tong Z, Martyn K, Zhao W, Lin CP, Glicksman MA, Karp JM. *Tetrandrine identified in a small molecule screen to activate mesenchymal stemcells for enhanced immunomodulation. (Sci Rep. 2016 Jul 26; 6:30263.)*